

REMARKS

The rejection of Claims 2-6 under 35 U.S.C. § 102(e) as anticipated by U.S. 6,150,043 (Thompson et al), is respectfully traversed.

The present invention is drawn to an organic electroluminescent device that comprises organic compound layer(s) including at least one organic emitting layer sandwiched between a pair of electrodes, wherein at least one organic compound layer is formed from an organic compound material and **said at least one organic compound layer contains lower than 500 ppm of a halogen-containing compound.** (Emphasis added.) As will be set forth below, Thompson et al neither anticipates nor otherwise renders unpatentable the presently-claimed invention.

Thompson et al discloses an organic light emitting device (OLED) comprising a heterostructure for producing electroluminescence having a hole transporting layer with a glass structure, which layer comprises a compound having a symmetric molecular structure wherein the end groups thereof are hole transporting amine moieties having an unsaturated linkage between two arenes (column 5, lines 44-51). As such a compound, Thompson et al exemplifies 4,4'-(N,N'-bisiminostilbene)biphenyl (ISB) (column 6, lines 47-48). Thompson et al contrasts this compound with a corresponding compound having a saturated linkage between two arenes (and thus outside Thompson et al's invention), i.e., 4,4'-(N,N'-iminodibenzyl)biphenyl (IDB) (column 6, lines 52-57). Thompson et al discloses the use of dibromobiphenyl as a starting material in the preparation of ISB, (column 16, line 48), and 4,4'-diiodobiphenyl as a starting material in the preparation of IDB (column 16, line 58). Both dibromobiphenyl and 4,4'-diiodobiphenyl are halogen-containing compounds. In the preparation of ISB, Thompson et al discloses that a dried residue is subjected to a gradient sublimation, resulting in "pure material" (column 16, lines 52-55). With regard to the IDB,

Thompson et al discloses that a solid left behind was sublimed ... “for purification” (column 17, lines 1-2).

The Examiner apparently interprets the above-quoted terms “pure material” and “for purification” to mean that the final product contains **no** amount of starting material or any other impurity. It is respectfully submitted that this interpretation is not reasonable. The terms “pure” and “for purification”, by themselves, are essentially meaningless because they are relative terms. For example, it is common knowledge that the commercial product IVORY SOAP has been advertised as being 99 and 44/100 percent pure. If true, that would leave 0.56% impurities, which is the same as 5600 ppm, which is an order of magnitude greater than the presently-recited maximum of 500 ppm. It is rare that a mixture of materials containing impurities is purified to the extent that no amounts of impurities are left. Since Thompson et al does not disclose particular sublimation temperatures used, and since different impurities present that sublimate would have their own sublimation temperatures, it is impossible to confirm that Thompson et al sublimates to such an extent that the amount of residual dibromobiphenyl or 4,4'-diiodobiphenyl remaining in the ISB or IDB, respectively, is lower than 500 ppm. Indeed, since Thompson et al does not recognize Applicants' discovery of a problem when an organic compound layer contains 500 ppm or more of a halogen-containing compound, it is likely that amounts in this range would still be considered pure by Thompson et al's standards.

For all the above reasons, it is respectfully requested that the rejection over Thompson et al be withdrawn.

**Applicants again ask the Examiner to correct the record by indicating that the Information Disclosure Statement (IDS) filed July 3, 2003, has been considered.** During an interview held November 30, 2004, the Examiner indicated that the IDS was proper and the references submitted therewith had been considered. The record to be corrected is the

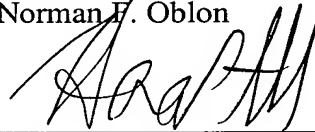
statement at page 2 of the Office Action dated April 7, 2004 that the IDS fails to comply with 37 C.F.R. §1.98(a)(2), and was therefore not considered, while the corresponding Form PTO-1449 attached to that Office Action is initialed by the Examiner, indicating that the IDS was considered.

Applicants respectfully call the Examiner's attention to the Information Disclosure Statement (IDS) **filed herewith**. The Examiner is respectfully requested to initial the Form PTO 1449 submitted herewith, and include a copy thereof with the next Office communication.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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